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10/730,485	12/08/2003	Raymond C. Kurzweil	13151-006001	2555

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EXAMINER

STOFFREGEN, JOEL

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2626

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10/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/730,485	Applicant(s) KURZWEIL, RAYMOND C.	
	Examiner Joel Stoffregen	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is response to applicant's amendment filed 08/30/2007. The applicant amended the drawings, specification, and claims. All previous objections are withdrawn. The applicant amended claims 1, 4, 6-10, 15-18, 20, 22, 23, 28, 29, and 30. Claims 1-31 are currently pending in this application.

Response to Arguments

2. Applicant's arguments in regard to the rejection of claims 1-31 have been fully considered but they are not persuasive.

The applicant argued that Bennett (7,050,977) fails to teach "receiving a transaction request from a user as text input" as claimed in claim 1 (see p. 11 of applicant's remarks). The examiner respectfully disagrees. While Bennett does use speech as an input, this speech is converted to text. It is this text that is input for the conversation processing (see Bennett, column 11, lines 14-18).

The applicant further argued that Bennett fails to teach "using natural programming language to analyze the text input to build conversations with the user based on the transaction request [and] conducting the transaction with the user based on the text input" as claimed in claim 1 (see p. 12 of applicant's remarks). The examiner respectfully disagrees. The Natural Language Engine of Bennett is used to understand the meaning of a user's query, so that the system can respond with an appropriate answer. This act of asking a question and receiving an answer is a conversation, as it

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consists of two entities exchanging words. The user's question is equivalent to a transaction request.

The applicant further argued that Bennett fails to teach "searching a database to find related information associated with conducting the transaction" or "searching a database in conjunction with the match" as claimed in claims 2 and 6 (see p. 12 of applicant's remarks). The examiner respectfully disagrees. The user's question is a part of a transaction. Therefor searching a database for questions corresponding to the user's query (see Bennett, column 25, lines 15-16) reads on the claimed limitations.

The applicant further argued that Bennett fails to teach that "animating comprises natural language programming techniques to develop and build conversations between the user and the avatar" as claimed in claim 8 (see p. 12 of applicant's remarks). The examiner respectfully disagrees. The question and answer dialog of Bennett (column 36, lines 28-29) is a conversation that has inherently been developed and built. If it were not built, then no dialog could take place.

The applicant further argued that Bennett and Smith (6,853,982) fail to teach follow-up messages as claimed in claims 3-5 (see p. 13 of applicant's remarks). As previously stated, Bennett does disclose building a conversation, as a question and answer dialog. And Smith discloses expanding on a conversation with additional items (see column 7, lines 30-32). The applicant did not specifically address how the additional items of Smith differ from the follow-up messages as claimed. The examiner maintains that Bennett and Smith teach all of the claimed limitation of claims 3-5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 2, 6-16, and 19-29** are rejected under 35 U.S.C. 102(e) as being anticipated by BENNETT (Patent No.: US 7,050,977).

5. Regarding **claim 1**, BENNETT teaches a computer implemented method of conducting commerce ("e-commerce applications", column 8, lines 44-45), the method comprising:

receiving a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);

using natural programming language to analyze the text input to build a conversation with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting a transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

tracking the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

6. Regarding **claim 2**, BENNETT further teaches that tracking comprises:

searching a database to find related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

7. Regarding **claim 6**, BENNETT further teaches that generating the response comprises:

searching a database for content related to the transaction request ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animating the avatar with a voice and facial movements corresponding to content found in the database ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

8. Regarding **claim 7**, BENNETT further teaches that animating comprises generating helpful verbal suggestions for conducting the transaction ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

9. Regarding **claim 8**, BENNETT further teaches that animating comprises processing text input from the user with natural language programming techniques to develop and build conversations between the user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

10. Regarding **claim 9**, BENNETT further teaches that receiving the text input is in response to a suggestion generated by the avatar ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

11. Regarding **claim 10**, BENNETT further teaches that the program performs an inquiry for financial information related to the user ("account information", FIG. 18, column 37, lines 34-35).

12. Regarding **claim 11**, BENNETT further teaches that the program supports a sales transaction ("ordering", FIG. 18, column 37, line 33).

13. Regarding **claim 12**, BENNETT further teaches that the program supports a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

14. Regarding **claim 13**, BENNETT further teaches that the program supports a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-65).

15. Regarding **claim 14**, BENNETT further teaches that the program calls another program to process an inquiry (see FIG. 5, the query is processed by a number of different modules).

16. Regarding **claim 15**, BENNETT teaches a computer program product ("microcode and software routines", column 38, lines 57-58) residing on a computer readable medium ("suitable machine-readable format", column 38, line 61), for conducting commerce ("e-commerce applications", column 8, lines 44-45) comprises instructions for causing a computer to:

receive a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);

analyze the text input using natural programming language to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting a transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generate a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

track the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

17. Regarding **claim 16**, BENNETT further teaches that the instructions to track comprise instructions to:

search a database for related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

18. Regarding **claim 19**, BENNETT further teaches that the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

19. Regarding **claim 20**, BENNETT further teaches that the instructions to generate the response comprise instructions to:

search a database for content related to the transaction request ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animate the avatar with a voice and facial movements corresponding to content found in the database ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

20. Regarding **claim 21**, BENNETT further teaches that the instructions to animate comprise instructions to generate verbal suggestions for conducting the transaction ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

21. Regarding **claim 22**, BENNETT further teaches that the instructions to animate comprise instructions to use natural language processing to develop and build conversations between the user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

22. Regarding **claim 23**, BENNETT further teaches that the program performs an inquiry for financial information related to the user ("account information", FIG. 18, column 37, lines 34-35).

23. Regarding **claim 24**, BENNETT further teaches that the program supports a sales transaction ("ordering", FIG. 18, column 37, line 33).

24. Regarding **claim 25**, BENNETT further teaches that the program supports a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

25. Regarding **claim 26**, BENNETT further teaches that the program supports a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-65).

26. Regarding **claim 27**, BENNETT further teaches that the program calls another program to process an inquiry (see FIG. 5, the query is processed by a number of different modules).

27. Regarding **claim 28**, BENNETT teaches a system for conducting commerce, the system comprising:

a server computer (see FIG. 1, block 180, "server-side") for

receiving a transaction request from a user as text input ("outputs recognized speech text corresponding to the user's question", column 11; lines 14-15);

analyzing the text input using natural programming language processing to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting the transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

tracking the transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

28. Regarding **claim 29**, BENNETT further teaches:

a client system (see FIG. 1, block 150, "client-side") for sending the text input to the server ("set of speech vectors that are transmitted over communication channel 160", column 11, lines 8-9), with the client system executing a web browser program ("web page in browser 1200", column 38, line 2).

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. **Claims 3-5, 17, 18, 30, and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over BENNETT (Patent No.: US 7,050,977) in view of SMITH et al. (Patent No.: US 6,853,982).

31. Regarding **claim 3**, BENNETT teaches all of the claimed limitations of claim 1. However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

32. Regarding **claim 4**, SMITH further teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

33. Regarding **claim 5**, BENNETT further teaches that the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

34. Regarding **claim 17**, BENNETT teaches all of the claimed limitations of claim 15. However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

35. Regarding **claim 18**, SMITH further teaches that responses to the follow-up messages are received ("rate individual book titles", column 10, lines 17-18) and the responses (see column 9, lines 37-52, ratings information is used) are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

36. Regarding **claim 30**, BENNETT teaches all of the claimed limitations of claim 28. However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

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37. Regarding **claim 31**, SMITH further teaches that the server receives responses to the follow-up messages ("rate individual book titles", column 10, lines 17-18) and statistically analyzes the responses (see column 9, lines 37-52, ratings information is used) to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

Conclusion

38. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS


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